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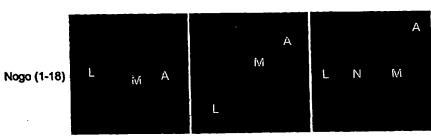
(54) Title: A NOVEL REGULATOR OF ENDOTHELIAL CELL FUNCTION AND VESSEL REMODELING

Nogo expression decreases after injury and by 21 days is almost completely gone from vessel wall

Normal

10 days

21 days



(57) Abstract: The present invention relates to previously unknown biological roles of Nogo-B. We have discovered that Nogo-B is a component of endothelial cells. We have also discovered that Nogo-B is highly expressed in intact blood vessels. The amino terminus of Nogo-B promotes the adhesion, spreading and migration of endothelial cells and plays a role in vascular remodeling. Thus, Nogo-B is a novel regulator of vascular homeostasis and remodeling. The present invention provides compositions comprising Nogo-B and fragments and fusion proteins thereof. The present invention also relates to nucleic acids encoding Nogo-B and fragments and fusion proteins thereof, as well as vectors and cells comprising such nucleic acids. The present invention also relates to antibodies specific for Nogo-B and fragments and fusion proteins thereof. The present invention also provides methods for preventing, detecting and treating Nogo-B-related diseases, disorders and conditions.